

#### St Andrews School of Medicine (SASoM) Systems Pathology Group



#### Method Procedure

Document Number: SASoM/METHOD/096.v3

Title: Preparation and Fixation of Cell Culture Cytospin preparations.

Version: v3

Author: Peter Mullen

Effective from:	13/05/2020	
Valid to:	12/05/2022	

SOP History		
Number	Date	Reason for Change
v1	13/05/2016	Original
v2	13/05/2018	Update •
v3	13/05/2020	Biennia Update

#### 1.0 Purpose -

This SOP describes the current procedure for preparing cytospins from cultured cells using the Shandon Cytospin instrument. A separate SOP is available for the operation of the instrument itself (SASoM/EQUIP/092). Both SOPs should be used in conjunction with each other.

#### 2.0 Scope -

The scope of this document is to describe the procedure for preparing cytospins using the Shandon Cytospin.

#### 3.0 Responsibilities

All staff involved in looking in preparing cytospins using the Shandon Cytospin are responsible for ensuring that the methods are followed in accordance with this SOP. All staff must have read and signed the relevant risk assessment documents before performing this procedure.



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#### 4.0 Procedure -

- 1. All users must be familiar with SASoM/EQUIP/092 Use of the Shandon Cytospin
- 2. Cells should be cultured, trypsinised, counted and then prepared at a final concentration of 0.2x10<sup>6</sup> cell/mL in PBS using standard cell culture techniques.
- 3. 100µl of the cell sample is pipetted into each previously assembled sample chamber, ensuring the pipette tip is inserted into the outlet port and not just the mouth of the funnel.
- 4. The samples are then centrifuged for 5 minutes at 800rpm.
- 5. Disassemble the slide carrier and carefully remove the slides, being careful to not disturb the cell smear on each slide.
- 6. Immerse the slides into ice-cold methanol and leave in ice for 2 minutes.
- 7. Remove the slides and then allow to air dry for 5-10 minutes at room temperature.
- 8. Store slides long term at -20°c prior to staining

#### 5.0 Personal protection -

A Howie laboratory coat and lab gloves must be worn at all times.

#### 6.0 Spillages -

Always clean up and disinfect any spills immediately after use, only you know what you have spill and are aware of its hazard.

#### 7.0 Training -

All staff should undergo training in this technique before performing procedure.

#### 8.0 Related documents -

SOPS - SASoM/EQUIP/092 Use of the Shandon Cytospin



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# SCHOOL OF MEDICINE

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### 9.0 Approval and sign off -

**Author:** 

Name: Peter Mullen

Position: Research Fellow

Signature: Date:

**Management Approval:** 

Name: Peter Mullen

Position: Research Fellow

Signature: Date:

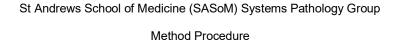
QA release by:

Name: Alex MacLellan

Position: QA Manager

Signature: Date:







# STANDARD OPERATING PROCEDURE

Please sign below to indicate you have read this S.O.P and understand the procedures involved.

NAME	POSITION HELD	SIGNATURE	DATE
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